TECHNOLOGY SAFETY DATA SHEET
Excel Automatic Locking Scaffold

Section 1: Technology Identity	
Manufacturer's Name and Address:	Emergency Contact:
Bartlett Services, Inc. 60 Industrial Park Road Plymouth, MA 02360 www.excelscaffold.com	Joe Washington BARTLETT PROJECT MANAGER/SCAFFOLDING Office: (910) 457-2066 Fax: (910) 457-3056 Bartlett Pager (804) 970-4803 CP&L Pager (910) 412-0677 Cell (910) 523-1763 email joe.washington@pgnmail.com Pager Text Message: 9104120677@page.metrocall.com
Other Names:	Information Contact:
Excel Modular Scaffold Locking Scaffold Technology ID: 2320	James Elkins 1-800-652-7712 Fax 1-508-830-0997 jimelkins@prodigy.net
Date Prepared:	Prepared by:
01-03-02	Operating Engineers National Hazmat Program Assessment Team: Chip Booth MS, Safety Professional Aaron Ondo MS, Industrial Hygienist, and three Operating Engineers Master Instructors, David Curry, Eddie Ford, and Todd Mullins.

Section 2: Process Descriptions

The Excel Automatic Locking Scaffold utilizes a patented positive locking trigger mechanism that locks the horizontal bearers and other attachments to the vertical legs. The trigger mechanism attaches to cups on the vertical legs, spaced at 5.75-inch intervals. Horizontal and vertical pipes are designed to be compatible with standard 1.90-inch outside diameter (OD) tube and clamp material. Vertical legs range from 1 foot to 10 feet. The system also can supply various pre-manufactured components such as ladders, spring loaded swing gates, floor hatches, trusses, trolleys, chain-fall, cantilever attachments, lifting attachments, stairs, casters, screw jacks, and various other components.

Section 3: Technology Diagrams or Pictures

Positive locking trigger mechanism fastened to vertical bar.

Users assembling the Excel Automatic Locking Scaffold System.

Section 4: Safety Hazards

Hazard Category:

4- Could result in death or permanent total disability

3- Could result in permanent partial disability or injuries or occupational illness that may result in hospitalization of at least three persons

2- Could result in injury or occupational illness resulting in one or more lost work days

1- Could result in injury or illness not resulting in a lost work day

A. Buried Utilities, Drums, and Tanks	Hazard Rating: N/A
Not applicable to this technology.	
B. Chemical (Reactive, Corrosive, Pyrophoric, etc.)	Hazard Rating: N/A
Not applicable to this technology.	

Section 4: Safety Hazards Continued	
C. Confined Space	Hazard Rating: N/A
Technology does not create any confined space hazards.	
D. Electrical	Hazard Rating: N/A
Not applicable to this technology.	
E. Ergonomic	Hazard Rating: 2
Users should always use proper lifting techniques and seek help when lifting heavy components or working in awkward positions.	
F. Explosives	Hazard Rating: N/A
. Not applicable to this technology.	
G. Fire Protection	Hazard Rating: N/A
Not applicable to this technology.	
H. Gas Cylinders	Hazard Rating: N/A
If the scaffold system is set on castors, users should ensure castors are locked and all use follows manufacturer recommendations. Not applicable to this technology.	
I. Ladders/Platforms	Hazard Rating: 3
Traditional hazards associated with working from heights apply; users should follow all OSHA regulations and manufacturer recommendations. Proper fall protection should be used during set-up and dismantlement.	
J. Lockout/Tagout	Hazard Rating: N/A
Not applicable to this technology.	
K. Mechanical Hazards	Hazard Rating: 1
Locking trigger mechanism should be checked prior to each use and users should ensure each piece is secured when erecting scaffold.	
L. Moving Vehicles	Hazard Rating: N/A
Not applicable to this technology.	
M. Overhead Hazards	Hazard Rating: 2
The Excel Scaffold does not create any new hazards. Users should always use toe boards and avoid areas under the scaffold system. If users are working around the base of the system or assembling or dismantling hard hats should always be worn.	
N. Pressure Hazards	Hazard Rating: N/A
Not applicable to this technology.	
O. Slips/Trips/Falls	Hazard Rating: 2
Users should always use caution when erecting or dismantling the scaffold system. Always practice good housekeeping when working on or around scaffold systems. And never work on scaffold systems during inclement weather.	
P. Suspended Loads	Hazard Rating: 1
Users may suspend loads while raising or lowering on to scaffold platforms. Always ensure rigging is capable of withstanding the load.	
Q. Trenching/Excavation	Hazard Rating: N/A
Not applicable to this technology.	

Section 5: Health Hazards	
A. Inhalation	Hazard Rating: N/A
Not applicable to this technology.	
B. Skin Absorption	Hazard Rating: N/A
Not applicable to this technology.	
C. Noise	Hazard Rating: N/A
Not applicable to this technology.	
D. Heat Stress	Hazard Rating: 1
Users will be subjected to some heat stress if ambient temperature is high enough. Users should always be conscious of signs and symptoms of heat stress.	
E. Ergonomics	Hazard Rating: 2
Lifting, pulling, and static lifts are required setting up the Excel Locking Scaffold. The quick fastening system dramatically reduces the number and length of static lifts traditionally associated with scaffold set up.	
F. Ionizing Radiation	Hazard Rating: N/A
Not applicable to this technology.	
G. Non-ionizing Radiation	Hazard Rating: N/A
Not applicable to this technology.	
H. Biological Hazards	Hazard Rating: N/A
Not applicable to this technology.	
Section 6: Phase Analysis	
A. Construction/Start-up	
Users should practice proper lifting techniques when lifting components. Users should limit static lifts by seeking assistance. Static lifts occur when users are forced to remain in a fixed or rigid position holding or supporting an object. Only qualified and competent users should erect or modify the scaffold. Users should always follow manufacturer recommendations when erecting the scaffold system. Users should ensure each trigger locking mechanism is securely fastened. Users should use caution when working around pinch points.	
B. Operation	
Users should only use components as recommended by the manufacturer. Users should always comply with OSHA regulations concerning scaffold use. A competent person must inspect scaffolds prior to each shift.	
C. Maintenance	
Only qualified and competent users should erect or modify the scaffold. Users should practice caution when working with the trigger mechanism as each one is a pinch point.	
D. Shutdown (Emergency and Routine)	
Not applicable to this technology.	

Section 6: Phase Analysis Continued
E. Decommissioning
Users should practice proper lifting techniques when disassembling scaffold. Users should limit static lifts by seeking assistance. Users should always follow manufacturer's recommendations when disassembling the scaffold system. Scaffold may only be disassembled under the supervision of a competent person.
Section 7: Worker Protection Measures
A. Exposure Monitoring
This technology does not create a need for air monitoring.
B. Worker Training
• Technology specific training on the Excel Automatic Locking Scaffold. • OSHA Outreach training that includes training on 29 CFR § 1910.28, Safety Requirements for Scaffolding or 29 CFR § 1926.450 Scaffolds.
C. Medical Surveillance
This technology does not create a need for medical surveillance.
D. Engineering Controls
No engineering controls are recommended.
E. Administrative Controls
Only those administrative controls recommended by OSHA outlined in its scaffolding requirements are required.
E. Personal Protective Equipment
Hard hats when working on or around scaffold. Gloves when assembling scaffold system. Steel toe boots when working on or around scaffold.
Section 8: Emergency Preparedness
This technology does not require any additional emergency preparedness that would not already be in place.
Section 9: Comments, Lessons Learned, and Special Considerations
Always follow manufacturer recommendations for scaffold use.